

sends a first signal to processor **130** which processes the signal using user interface software **160**. User interface software **160** interprets the signal as a selection of the “shirts” category based on the screen location of the currently display data and the selected area on active edge input device **420**. Since the touch or press only implements the first step of the “two-step” functionality described herein, the “shirts” category is simply highlighted for the user.

[0059] Once the sub-category is highlighted, the user has the option of accepting the selected category or moving to another displayed category. The latter option highlights a newly selected sub-category in a manner similar to the highlighted “shirts” sub-category. If the user chooses to accept the “shirts” sub-category, they simply increase the pressure on active edge input device **420** until the electrical contacts of active edge input device **420** contact the electrical contacts connected to a surface of the host device. This operation implements the second step of “two-step” functionality described herein. At this point, a second signal is sent to processor **130** indicating that the selection is accepted and the “shirts” sub-category moves to the left side of the screen under the “clothing” category, as illustrated in **FIG. 4b**. User interface software **160** then implements the function associated with the user selection that, in this example, is updating the category listing with “shirts.”

[0060] The function implemented by user interface software **160** will change depending on the user environment. For example, the display may show an “Announce” function that, when selected, announces predetermined information to specified subscribers over a wireless or wireline communication channel. The “Announce” function may allow the user to select the priority of the announcement by displaying priority selections adjacent an active edge input device (e.g., gold priority for urgent, silver priority for semi-urgent, and bronze for not urgent). Using the active edge input device, the user can scroll through the displayed priority categories and select the desired priority using the “two-step” functionality described herein. Another example of this feature is discussed with reference to **FIGS. 5a-5d**.

[0061] **FIG. 5a** illustrates an implementation of an active edge user interface on a wireless communications device **500** for responding to a call consistent with the present invention. Wireless communication device **500** is a host device that includes a display **510**, an active edge input device **520**, and a keypad **525**. The upper highlighted portion of display **510** indicates the currently displayed function (e.g., “call from” or “contact”). The middle portion of display **510** shows data entered by a user or received from a remote device. The lower portion of display **510** shows function parameters, such as “Fwd,” “Ans,” and “Send.” Active edge input device **520** is a continuous strip of flexible material that borders three sides of display **510**. Active edge input device **520** includes protrusions in the shape of ribs **540** on the left and right sides of display **510**, and buttons **550** on the bottom side of the display. One or more buttons **550** correspond to one or more of the displayed function parameters.

[0062] Display **510** in **FIG. 5a** indicates to the user that wireless communications device **500** is receiving or has received a call from “Alan Frank” whose telephone number is “459-6232.” The user has the option of answering or forwarding the call by pressing the appropriate button **550**.

If the “Ans” function parameter is selected, wireless communications device **500** connects the call. If the “Fwd” function parameter is selected, the user has the option of forwarding the call to “VMail” (i.e., voicemail) or to “Home” (i.e., to telephone number “763-5463”) as illustrated in **FIG. 5b**. The user can move between each displayed option, for example, by dragging a finger along the left or right side surface of active edge input device **520**. One skilled in the art will appreciate that active edge user interface may be configured such that the user can only use one side of active edge input device to select between the options on display **510**.

[0063] When the user is touching or slightly pressing on an area of active edge input device **520** adjacent a desired option, the option is highlighted, as shown in **FIG. 5b**. The touching or slight pressure represents the first step of the “two-step” functionality implemented by embodiments consistent with the present invention. To accept the highlighted option, the user presses harder on active edge input device **520**, which forwards Alan Frank’s call to the user’s home. This secondary pressure represents the second step of the “two-step” functionality. The user may choose to quit the current display at any time by touching on active edge input device **520** below the displayed “Quit” function parameter.

[0064] The user may choose to make a call from wireless communications device **500**. In this instance, the user presses on active edge input device **520** below the “Call” function as illustrated in **FIG. 5c**. Upon selecting this function, a list of names stored in memory appears on display **510**. If the list is voluminous, the user can scroll through the list by dragging (e.g., touching or slightly pressing) a finger or other instrument in an upward or downward motion across the surface of active edge input device **520**. In the scrolling mode, display **510** may automatically switch to an iconic view to show where the user is on the list, as shown in **FIG. 5c**.

[0065] Upon reaching a desired name on the list, the name is highlighted by the touch or slight pressure on active edge input device **520** adjacent the name, as illustrated in **FIG. 5d**. The user can then initiate the call by pressing harder on active edge input device **520**. Alternatively, the user could only send a message to a specified person by selecting the appropriate function key on the bottom of display **510**.

[0066] **FIG. 6** illustrates a method for implementing an active edge user interface consistent with the present invention. Initially, an active edge user interface generates an image on a display in response to a touch or pressure on a predetermined area of an input device adjacent the display (step **600**). Subsequently, active edge user interface implements a function associated with the image when a greater pressure is applied to the predetermined area of the input device (step **620**). The function, for example, could be calling a highlighted name (i.e., represented by the image) on a wireless communications device.

[0067] Systems and methods consistent with the present invention thus provide an active edge user interface that offers great functionality and ease-of-use. Moreover, an active edge user interface consistent with the present invention eliminates the need to touch the actual display while preserving the benefits of a graphical user interface.

[0068] While there has been illustrated and described preferred embodiments and methods of the present inven-